# THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

ATEN INTERNATIONAL CO., LTD. and ATEN TECHNOLOGY, INC.  Plaintiff,	) ) CASE No. 2:08-CV-253 LED ) ) JURY TRIAL DEMANDED
v.	)
EMINE TECHNOLOGY CO., LTD., BELKIN INTERNATIONAL, INC., and BELKIN, INC.	) ) )
<b>Defendants.</b>	)

# DEFENDANTS BELKIN INTERNATIONAL, INC. AND BELKIN, INC.'S SUPPLEMENTAL ANSWER TO FIRST AMENDED COMPLAINT AND COUNTERCLAIMS

Defendants Belkin International, Inc. and Belkin, Inc. (collectively "Belkin") hereby supplement their answer to the First Amended Complaint ("complaint") in Case No. 2:08-CV-00253 of plaintiffs ATEN International Co., Ltd. and ATEN Technology, Inc. (collectively "ATEN") as follows:

- 1. Answering paragraph 1 of the complaint, Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations contained therein.
- 2. Answering paragraph 2 of the complaint, Belkin lacks knowledge or information sufficient to form a belief about the truth of the allegations contained therein.
- 3. Answering paragraph 3 of the complaint, Belkin lacks knowledge or information sufficient to form a belief about the truth of the allegations contained therein.
- 4. Answering paragraph 4 of the complaint, Belkin admits that Belkin International, Inc. and Belkin, Inc. are corporations organized under the laws of the state of Delaware with their principal place of business in Compton, California. Belkin admits

that it has conducted business and has offered to sell and has sold products to customers in this judicial district and throughout Texas. Belkin denies that it has offered to sell or sold any products that infringe any claims of U.S. Patent No. 6,564,275 ("the '275 patent"). Except as expressly admitted above, Belkin denies each and every allegation of paragraph 4 of the complaint.

- 5. Answering paragraph 5 of the complaint, with respect to all allegations relating to Emine Technology Co., Ltd. ("Emine"), Belkin lacks knowledge or information sufficient to form a belief about the truth of those allegations. Belkin admits that ATEN has brought a patent infringement action arising under the United States Patent Laws, 35 U.S.C. § 100 *et seq.* including 35 U.S.C. § 271. Belkin further admits that what appears to be copies of U.S. Patent No. 7,035,112 ("the '112 patent") and the '275 patent are attached to the complaint as Exhibits A and B, respectively, but denies all allegations of patent infringement. Except as expressly admitted above, Belkin denies each and every allegation of paragraph 5 of the complaint.
- 6. Answering paragraph 6 of the complaint, Belkin admits that this Court has subject matter jurisdiction over this matter under 28 U.S.C. §§ 1331 and 1338(a).
- 7. Answering paragraph 7 of the complaint, with respect to all allegations relating to Emine, Belkin lacks knowledge or information sufficient to form a belief about the truth of those allegations. Belkin admits that it is subject to personal jurisdiction in the Eastern District of Texas, but denies ATEN's allegations of patent infringement. Except as expressly admitted above, Belkin denies each and every allegation of paragraph 7 of the complaint.
- 8. Answering paragraph 8 of the complaint, with respect to all allegations relating to Emine, Belkin lacks knowledge or information sufficient to form a belief about the truth of those allegations. Belkin admits that venue is facially proper as to it in this district based upon ATEN's allegation that Belkin has committed infringing acts within this district, but denies that this district is the most appropriate venue for this

dispute, and also denies Aten's allegations of patent infringement. Except as expressly admitted above, Belkin denies each and every allegation of paragraph 8 of the complaint.

- 9. Answering paragraph 9 of the complaint, Belkin admits that on its face the '112 patent states that it issued on April 25, 2006 to Kevin Chen, and that it is entitled "AUTOMATIC SWITCH." Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 9 the complaint. Except as expressly admitted above, Belkin denies each and every allegation of paragraph 9 of the complaint.
- 10. Answering paragraph 10 of the complaint, Belkin admits that to its knowledge, only two companies have settled litigation brought against them by ATEN by taking "licenses" under the '112 patent; but denies that such litigation settlements constitute either "acknowledgement" or "appreciation" of the "invention in the '112 patent;" and denies any other allegations of paragraph 10 of the complaint.
- 11. Answering paragraph 11 of the complaint, Belkin admits that to its knowledge RATOC Systems Inc. is one of the two companies that have entered into litigation settlements with ATEN; Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations contained therein.
- 12. Answering paragraph 12 of the complaint, Belkin admits that to its knowledge JustCom Tech, Inc. is the other of the two companies that have entered into litigation settlements with ATEN; Belkin lacks knowledge or information sufficient to form a belief about the truth of the allegations contained therein.
- 13. Answering paragraph 13 of the complaint, Belkin admits that on its face the '275 patent states that it issued on May 13, 2003 to Sun Chung Chen, and that it is entitled "ELECTRONIC SWITCHING DEVICE FOR A UNIVERSAL SERIAL BUS INTERFACE." Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 13 the complaint.

- 14. Answering paragraph 14 of the complaint, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations contained therein.
- 15. Answering paragraph 15 of the complaint, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of the allegations contained therein.
- 16. Answering paragraph 16 of the complaint, Belkin lacks knowledge or information sufficient to form a belief about the truth of the allegations contained therein.
- 17. Belkin denies each and every allegation contained in paragraph 17 of the complaint.
- 18. Belkin denies each and every allegation contained in paragraph 18 of the complaint.
- 19. Belkin denies each and every allegation contained in paragraph 19 of the complaint.
- 20. Belkin incorporates the answers to paragraphs 1 through 19 of the complaint as though fully and completely set forth herein.
- 21. Belkin lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 21 of the complaint.

- 22. Answering paragraph 22 of the complaint, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations contained therein..
- 23. Answering paragraph 23 of the complaint, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations contained therein.
- 24. Answering paragraph 24 of the complaint, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations contained therein.
- 25. Belkin incorporates the answers to paragraphs 1 through 24 of the complaint as though fully and completely set forth herein.
- 26. Answering paragraph 26 of the complaint, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on

information and belief Belkin admits that at least as of the filing date of the complaint Emine would have been aware of the '112 patent; Belkin lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 26 of the complaint.

- 27. Answering paragraph 27 of the complaint, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations contained therein.
- 28. Answering paragraph 28 of the complaint, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations contained therein.
- 29. Belkin incorporates the answers to paragraphs 1 through 28 of the complaint as though fully and completely set forth herein.
- 30. Belkin lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 30 of the complaint.
- 31. Answering paragraph 31, with respect to all allegations relating to Emine, Belkin lacks knowledge or information sufficient to form a belief about the truth of those allegations. As to the remaining allegations, Belkin denies each and every allegation of paragraph 31 of the complaint.

- 32. Answering paragraph 32, with respect to all allegations relating to Emine, Belkin lacks knowledge or information sufficient to form a belief about the truth of those allegations. As to the remaining allegations, Belkin denies each and every allegation of paragraph 32 of the complaint.
- 33. Answering paragraph 33, with respect to all allegations relating to Emine, Belkin lacks knowledge or information sufficient to form a belief about the truth of those allegations. As to the remaining allegations, Belkin denies each and every allegation of paragraph 33 of the complaint.
- 34. Belkin incorporates the answers to paragraphs 1 through 33 of the complaint as though fully and completely set forth herein.
- 35. Answering paragraph 35, with respect to all allegations relating to Emine, Belkin lacks knowledge or information sufficient to form a belief about the truth of those allegations. Belkin admits that it now has knowledge of the '275 patent as of the date of service upon it of the complaint; but denies that it had either actual or constructive knowledge of the '275 patent before that time. As to the remaining allegations, Belkin denies each and every allegation of paragraph 35 of the complaint.
- 36. Answering paragraph 36, with respect to all allegations relating to Emine, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of any other allegations as to Emine. As to the remaining allegations, Belkin denies each and every allegation of paragraph 36 of the complaint.
- 37. Answering paragraph 37, with respect to all allegations relating to Emine, Belkin is informed and believes that the products which ATEN is accusing Emine of infringement in this action were the same or substantially the same products which were

found not to infringe the '112 patent in International Trade Commission Investigation 337-TA-589, and therefore on information and belief Belkin denies the allegations as to such Emine products; Belkin lacks knowledge or information sufficient to form a belief about the truth of any other allegations as to Emine. As to the remaining allegations, Belkin denies each and every allegation of paragraph 37 of the complaint, and specifically denies that ATEN has been, or will be, damaged in any manner or sum, or at all, as a result of any wrongful action on the part of Belkin.

38. In answer to paragraph 38 of the complaint, Belkin admits that ATEN has demanded a trial by jury on all issues.

## <u>AFFIRMATIVE DEFENSES</u>

As for separate and affirmative defenses, Belkin alleges as follows:

39. Belkin incorporates here the foregoing admissions, denials, and allegations.

#### FIRST AFFIRMATIVE DEFENSE

40. The '112 and '275 patents are invalid for failing to comply with one or more requirements of the patent laws of the United States, including, but not limited to, the conditions for patentability set forth in 35 U.S.C. §§ 101, 102, 103 and 112.

## SECOND AFFIRMATIVE DEFENSE

41. Belkin has not and is not infringing, and has not and is not contributing to or inducing the infringement of, either the '112 or '275 patents.

#### THIRD AFFIRMATIVE DEFENSE

42. ATEN is estopped by representations or actions taken during the prosecution of the '112 and '275 patents which limits the literal and equivalent scope of the claims of those patents under the doctrines of prosecution disclaimer and prosecution history estoppel.

#### FOURTH AFFIRMATIVE DEFENSE

43. ATEN's claim for damages, if any, is limited by 35 U.S.C. § 287.

# FIFTH AFFIRMATIVE DEFENSE

44. On information and belief, ATEN is barred in whole or in part from asserting the '112 and '275 patents against Belkin by the doctrine of laches, or waiver, or both.

# **SIXTH AFFIRMATIVE DEFENSE**

- 45. Upon information and belief, the '275 Patent is unenforceable by reason of inequitable conduct committed during the prosecution of the patent before the United States Patent and Trademark Office ("USPTO"). While the scope of such inequitable conduct is not now known in its entirety and with precision, such conduct includes the deliberate withholding of material information from the USPTO described below.
- 46. On or about February 28, 2000, the law firm Bacon & Thomas, PLLC filed U.S. Patent Application No. 09/514,579, entitled "An Electronic Switching Device for a Universal Serial Bus Interface" on behalf of Sun Chung Chen. This application issued as the '275 Patent on May 13, 2003 and is assigned to Aten International Co., Ltd. The '275 Patent claims priority to a Taiwanese patent application filed May 28, 1999. On information and belief, Mr. Chen was the Chief Executive Officer of Aten International Co., Ltd. at the time the '275 Patent Application was filed and throughout the prosecution thereof. The application that issued as the '275 Patent will be referred to herein as "the '275 Patent Application."
- 47. Aten International Co., Ltd., Sun Chung Chen and/or their attorneys failed to disclose material prior art and material information in connection with the prosecution of the '275 Patent Application. This failure to disclose was a violation of Sun Chung Chen's, Aten International Co., Ltd.'s and/or their attorneys' duties of candor and good faith. 37 C.F.R. § 1.56. Upon information and belief, this omission was done with the intent to deceive or mislead the USPTO.

- 48. When the '275 Patent Application was filed, it contained fourteen claims, one of which was independent and thirteen of which were dependent (either directly or indirectly) on claim 1. These claims were as follows:
  - 1. An electronic switching device for a universal serial bus (USB) interface, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

the trigger signal generator having an output to be connected with an input of the control signal generator, and having a switch to output a trigger signal to the control signal generator when a user enables the switch;

the control signal generator having an input to be connected with an output of the trigger signal generator, and having an ouput to be connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, and processing the trigger signal, then outputting a control signal to the connector;

the connector having an input to be connected with each universal serial bus (USB interface of at least two electronic devices, and having an output to be connected with a universal serial bus (USB( interface of another electronic device, when the connector receives the control signal outputted from the the control signal generator, the connector will connect related universal serial bus (USB) interfaces according to the control signal.

- 2. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the trigger signal generator comprising a resistor, a capacitor, and a switch, the resistor and the capacitor are serially connected between a power supply and a ground, one end of the switch is connected to the ground, the other end of the switch is connected to where the resistor and the capacitor are connected, enabling the switch to generate a pulse signal to be used as the trigger signal.
- 3. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator comprising a D FLIP-FLOP, having a clock signal input terminal to be used as the input of the control signal generator, and having a reverse data output terminal to be connected with a data input terminal thereof, a positive data output terminal thereof is used as the output of the control signal generator.
- 4. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the connector comprising a multiplexor, an input and an output of the multiplexor are connected respectively with each universal serial bus (USB) interface of different electronic devices, and a selecting signal input terminal thereof is connected with the output of the control signal generator.

- 5. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator comprising at least two D FLIP-FLOP's, a clock signal input terminal of the first D FLIP-FLOP is connected with the output of the trigger signal generator, while a reverse data output terminal is connected with its data input terminal; a clock signal input terminal of the second D FLIP-FLOP is connected with the reverse data output terminal of the first D FLIP-FLOP, while a reverse data output terminal of the second D FLIP-FLOP is connected with its data input terminal and so on; and the positive data output terminals of all the D FLIP-FLOP's are used as the control signals for the connector.
- 6. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the connector comprising at least two identical multiplexors to be parallely connected for decreasing the internal resistance in the connector.
- 7. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein a delay signal generator is provided between the trigger signal generator and the connector, having an input to be connected with the output of the trigger signal generator, and having an output to be connected with tan enable terminal of the connector.
- 8. An electronic switching device for a universal serial bus (USB) interface according to claim 7, wherein the delay signal generator comprising two resistors, a capacitor and a diode, having its input to be connected with the output of the trigger signal generator, and having its output to be connected with the enable terminal of the connector, the first resistor and the capacitor are serially connected between a power supply and a ground, a point where the first resistor and the capacitor are connected is connected with a positive terminal of the diode and the enable terminal of the connector, while a negative terminal of the diode is connected with one end of the second resistor, the other end of the second resistor is the input terminal of the delay signal generator
- 9. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator is connected with a display for showing the current connections of the universal serial bus (USB) interfaces.
- 10. An electronic switching device for a universal serial bus (USB) interface according to claim 9, wherein the display comprising light emitting diodes.
- 11. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator is connected with an enable signal generator so that the connections between different USB interfaces are the same whenever the power supply begins conducting.

- 12. An electronic switching device for a universal serial bus (USB) interface according to claim 11, wherein the enable signal generator comprising a resistor and a capacitor, the resistor and the capacitor are serially connected between the power supply and the ground, a point where the resistor and the capacitor are connected is used as an output to be connected with a reset terminal of the control signal generator.
- 13. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the power supply used by the electronic switching device for a universal serial bus (USB) interface is the power supply used by the connected universal serial bus (USB) interface
- 14. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein a diode is connected between the power supply and each USB interface to avoid the reverse current flowing from USB interface to the power supply
- 49. On September 4, 2002, during prosecution of the '275 Patent Application, the Examiner working for the USPTO issued an Office Action rejecting claims 1, 9-11, 13 and 14 under 35 U.S.C. § 103 as being unpatentable over the combination of U.S. Patent No. 6,118,496 ("Ho") in view of U.S. Patent No. 6,012,103 ("Sartore"). In the September 4, 2002 Office Action, the Examiner stated that Ho taught every limitation of claim 1 as filed except for the recited USB interfaces. The Examiner stated that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sartore, which taught USB interfaces, with the switching apparatus taught in Ho to arrive at the structure recited in claim 1.
- 50. In the same September 4, 2002 Office Action, the Examiner objected to claims 2-8 and 12 but indicated these claims 2-8 and 12 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." By doing so, the Examiner was indicating that he was not able to find the structure of the "trigger signal generator" recited in application claim 2 in the prior art. Similarly, this objection meant that the Examiner was not able to find the structure of the "connector" recited in application claim 4 in the prior art. Finally, the objection meant that the Examiner was not able to find the structure for the "enable signal generator" recited in application claim 12.

- 51. In response to this Office Action, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, did not attempt to argue that the Examiner's rejection under 35 U.S.C. § 103 was incorrect and therefore acquiesced in the rejection. Instead, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, only sought to overcome the claim objections made by the Examiner by rewriting claims 2-8 and 12 in independent form. The differences between the certain claims as filed and what eventually issued is printed below, with the additions to claims underlined and the deletions shown as being stricken through.
- 52. The differences between claim 1 of the '275 Patent as issued and the corresponding claim as filed are as follows:

(Issued claim 1, which was filed as claim 1) An electronic switching device for a universal serial bus (USB) interface, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

the trigger signal generator <u>having has</u> an output to be connected with an input of the control signal generator, and a switch to output a trigger signal to the control signal generator when a user enables the switch;

the trigger signal generator comprises a resistor, a capacitor, and a switch, the resistor and the capacitor being serially connected between a power supply and a ground one end of the switch being connected to the ground, and the other end of the switch being connected to where the resistor and the capacitor are connected, such that when a user enables the switch, the switch will generate a pulse signal to be used as a trigger signal for outputting to the control signal generator;

the control signal generator <u>having has</u> an input to be connected with an output of the trigger signal generator, and <u>having</u> an <u>ouput output</u> to be connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, <u>and</u> processing the trigger signal, <u>and</u> then outputting a control signal to the connector; <u>and</u>

the connector having has an input to be connected with each universal serial bus (USB) interface of at least two electronic devices, and having an output to be connected with a universal serial bus (USB) interface of another electronic device, such that when the connector receives the control signal outputted from the control signal generator, the connector will connect related universal serial bus (USB) interfaces according to the control signal.

As can be seen, claim 1 of the '275 patent was allowed by the Examiner because it recited

the structure for the claimed "trigger signal generator," namely a specific arrangement of a switch, resistor and capacitor.

53. The differences between claim 3 of the '275 Patent as issued and the corresponding claim as filed are as follows:

(Issued claim 3, which was filed as claim 4) An electronic switching device for a universal serial bus (USB) interface according to claim 1, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

the trigger signal generator has an output to be connected with an input of the control signal generator, and a switch to output a trigger signal to the control signal generator when a user enables the switch;

the control signal generator has an input to be connected with an output of the trigger signal generator, and an output to be connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, processing the trigger signal, and then outputting a control signal to the connector; and

the connector has an input to be connected with each universal serial bus (USB) interface of at least two electronic devices, and an output to be connected with a universal serial bus (USB) interface of another electronic device, such that when the connector receives the control signal outputted from the control signal generator, the connector will connect related universal serial bus (USB) interfaces according to the control signal, and

the connector <u>comprising</u> comprises a multiplexor, an input and an output of the multiplexor <u>are being</u> connected respectively with each universal serial bus (USB) interface of different electronic devices, and a selecting signal input terminal thereof <u>is being</u> connected with the output of the control signal generator.

As can be seen, claim 3 of the '275 patent was allowed by the Examiner because it recited the structure for the claimed "connector," namely a multiplexor.

54. The differences between claim 10 of the '275 Patent as issued and the corresponding claim as filed are as follows:

(Issued Claim 10, which was filed as claim 12) An electronic switching device for a universal serial bus (USB) interface according to claim 1, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

the trigger signal generator has an output to be connected with an input of the control signal generator, and a switch to output a trigger signal to the control signal generator when a user enables the switch:

the control signal generator has an input to be connected with an output of the trigger signal generator, and an output to be

connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, processing the trigger signal and then outputting a control signal to the connector; and

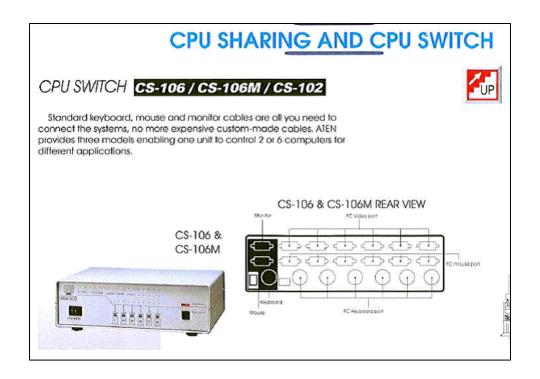
the connector has an input to be connected with each universal serial bus (USB) interface of at least two electronic devices, and an output to be connected with a universal serial bus (USB) interface of another electronic device, such that when the connector receives the control signal outputted from the control signal generator, the connector will connect related universal serial bus (USB) interfaces according to the control signal,

the control signal generator is connected with an enable signal generator so that the connections between different USB interfaces are the same whenever the power supply begins conducting; and

the enable signal generator <u>comprising comprises</u> a resistor and a capacitor, the resistor and the capacitor <u>are being serially connected between the power supply and the ground, <u>and</u> a point where the resistor and the capacitor are connected <u>is being</u> used as an output to be connected with a reset terminal of the control signal generator.</u>

As can be seen, claim 10 of the '275 patent was allowed by the Examiner because it recited the structure for the claimed "enable signal generator," namely a specific arrangement of a resistor and capacitor.

55. On information and belief, in 1996 or 1997, Aten offered for sale and/or sold, in the United States, a KVM switch identified with the part number CS-106. The product was sold as under the Aten brand name and was offered for sale in the United States and could be found in Aten's 1996 product catalog:



56. On information and belief, at approximately the same time, and no later than March of 1998, Belkin sold a KVM switch which it identified as the Belkin Omniview AT Style KVM Switch. Belkin assigned SKU – F1D065 to the Omniview AT Style KVM Switch. The Belkin Omniview AT Style KVM Switch was manufactured by Aten International Co., Ltd for Belkin. On information and belief, the Belkin Omniview AT Style KVM Switch is virtually identical in structure, function and operation to the Aten CS-106. Below are photographs of the front and back of the Belkin Omniview AT Style KVM Switch:





57. The photograph below of a printed circuit board within the Belkin Omniview AT Style KVM Switch establishes that it was manufactured by Aten, as Aten placed its name on the board. In addition, this board has the number code "9737" printed thereon. On information and belief, the number code "9737" is a date code establishing that this board was manufactured in the thirty seventh week of 1997.



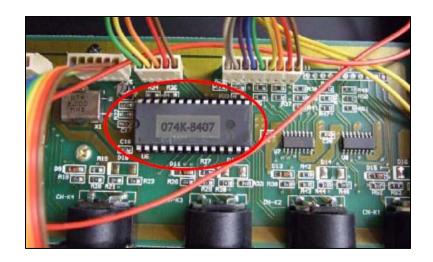
- 58. Because the Aten CS-106 was sold in the United States in 1996 and the Belkin Omniview AT Style KVM Switch was sold at least as early as March 1998, each of these products, both of which were manufactured by Aten International Co., Ltd, are prior art under 35 U.S.C. § 102(b) to the '275 Patent. The Aten CS-106 and Belkin Omniview AT Style KVM Switch will be referred to herein as the "Belkin Omniview KVM Switch" since this is the actual switch that Belkin has been able to locate and photograph.
- 59. The Belkin Omniview KVM Switch is remarkably similar in structure, function and operation to the switch described and claimed in the '275 patent and discloses every limitation of claim 1 of the '275 Patent as it was filed on February 28, 2000 and issued on May 13, 2003, except for the USB interfaces. However, substitution of USB interfaces with other types of interfaces, e.g., HD-15 VGA interfaces, DB-9 serial

interfaces and DIN-5 AT interfaces, is not patentable, as is demonstrated by the Examiner's refusal to allow claim 1 over a prior art reference ("Ho") that contained interfaces other than USB interfaces. Notwithstanding this fact, neither Aten International Co., Ltd., inventor Sun Chung Chen nor any of their attorneys disclosed the Belkin Omniview AT Style KVM Switch to the USPTO.

60. In particular, the Belkin Omniview KVM Switch has a "trigger signal generator," as is demonstrated by this photograph:

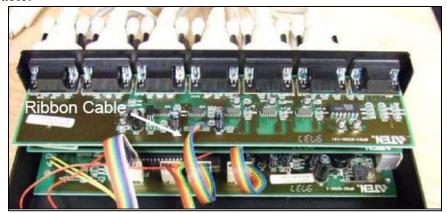


61. The output of the "trigger signal generator" in the Belkin Omniview KVM Switch produces a "trigger signal" and is connected to pin 15 of component labeled as U6 on a printed circuit board within the Belkin Omniview KVM Switch, as seen in the photograph below (circled in red):



The component at U6 is almost certainly a microcontroller, as it matches the pin out of a Microchip PIC 16C55, a microcontroller that was widely in use in 1996-1998. In ATEN's infringement contentions served in this litigation, ATEN asserts that microcontrollers used in Belkin's products comprise a control signal generator, meaning that microcontrollers fall within ATEN's definition of a control signal generator.

62. The output of the microcontroller, the electronic component Aten asserts in this litigation is a "control signal generator," is a control signal (comprised of three bits). The control signal, along with several other signals, are sent to a "connector" over a ribbon cable:

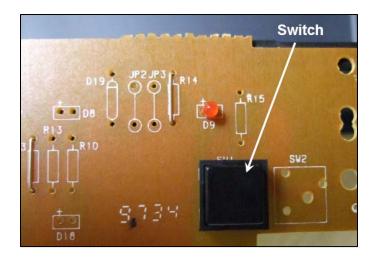


-20-

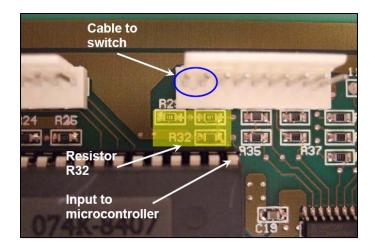
<sup>&</sup>lt;sup>1</sup> It appears that ATEN removed the part numbers from the chip during manufacture of the Belkin Omniview KVM Switch.

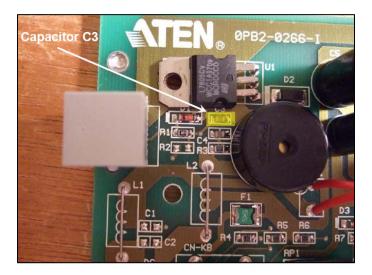
When the "connector" receives the control signal outputted from the microcontroller, the connector will connect VGA interfaces according to the control signal.

- 63. In sum, comparing claim 1 of the '275 patent as it was filed (see paragraph 48 above) to the Belkin Omniview KVM Switch demonstrates that the only difference is that claim 1 as filed required USB interfaces whereas the Belkin Omniview KVM Switch has HD-15 VGA interfaces, DB-9 serial interfaces and DIN-5 AT interfaces. However, as demonstrated by the September 4, 2002 Office Action, the Examiner of the '275 Patent Application correctly did not believe substitution of one type of interface with a USB interface was patentable.
- 64. As discussed above, the Examiner allowed claim 1 of the '275 Patent after claim 1 was amended to recite the specific structures that comprised the "trigger signal generator." However, when Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended claim 1 to obtain its allowance, each knew that the prior art Belkin Omniview KVM Switch contained the exact same "trigger signal generator" structure that the Examiner believed distinguished their claims from the prior art. In particular, the Belkin Omniview KVM Switch contained a "switch", as required by claim 1 as amended:

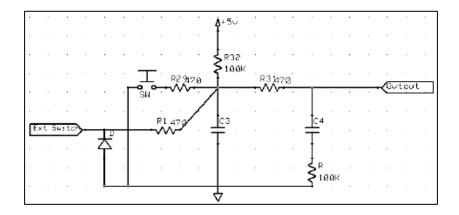


65. The remaining components of the "trigger signal generator" required by claim 1 of the '275 Patent are shown in the photographs below:



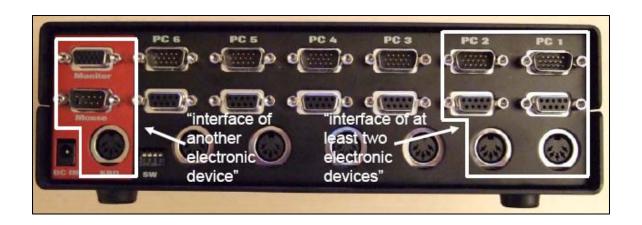


The schematic of this structure is below:



- 66. As is seen in this schematic, the Belkin Omniview KVM Switch has a "trigger signal generator" that comprises a resistor, a capacitor, and a switch, where the resistor and the capacitor are serially connected between a power supply and a ground, and where one end of a switch is connected to the ground while the other end of the switch is connected to where the resistor and the capacitor are connected.
- 67. Thus, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended claim 1 to obtain its allowance by reciting a structure for the "trigger signal generator" that was in all relevant respects identical to the "trigger signal generator" present in the Belkin Omniview KVM Switch, which was designed and manufactured by Aten.
- 68. Comparing claim 1 of the '275 patent as it was issued (see paragraph 52 above) to the Belkin Omniview KVM Switch demonstrates that the only difference is that claim 1 requires USB interfaces whereas the Belkin Omniview KVM Switch has HD-15 VGA interfaces, DB-9 serial interfaces and DIN-5 AT interfaces. However, as demonstrated by the September 4, 2002 Office Action, the Examiner of the '275 Patent Application correctly did not believe substitution of one type of interface with a USB interface was patentable.
- 69. As discussed above, the Examiner allowed claim 3 of the '275 Patent after the corresponding claim in the '275 Patent Application (application claim 3) was

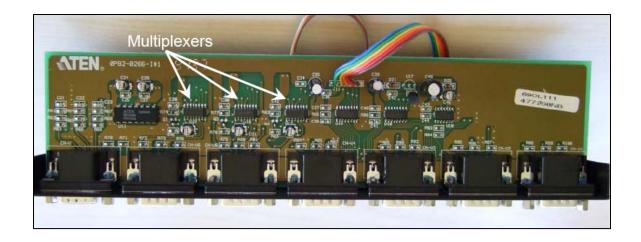
amended to include all the limitations of claim 1 as filed. Because claim 1 had been rejected by the Examiner while application claim 4 (issued claim 3) was indicated to be allowable if amended to include all the limitations of claim 1, the only feature of the claim the Examiner believed was not in the prior art was the specific structures recited comprising the "connector," namely a multiplexor. However, when Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended the claim to obtain its allowance, each knew that the prior art Belkin Omniview KVM Switch contained the exact same "connector" structure that the Examiner believed distinguished their claims from the prior art. In particular, the Belkin Omniview KVM Switch contained a "connector", as required by application claim 4 (issued claim 3) as amended:



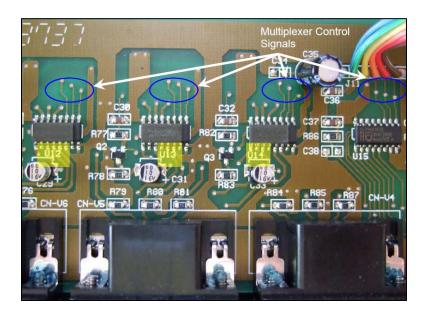
70. The control signal from the microcontroller at U6 (see paragraphs 61-62 above) is sent over a ribbon cable to multiplexers that switch VGA display signals. In particular, the control signal output from the microcontroller at U6 is connected to the selection inputs of integrated circuits that are almost certainly multiplexors belonging to the "4051" family.<sup>2</sup> In particular, three analog multiplexors switch VGA interfaces in the exact same fashion the multiplexor recited in claim 3 switches USB interfaces:

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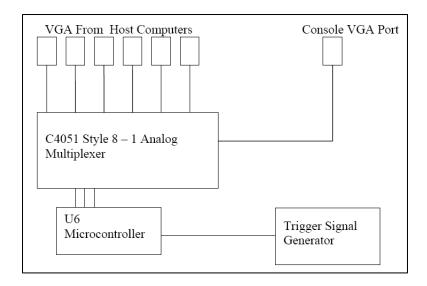
<sup>&</sup>lt;sup>2</sup> When ATEN manufactured the Belkin OmniView KVM Switch, it removed or obscured the manufacturer's markings on these integrated circuits but the pin outs of these chips match the pin out of a CD 4051 8 to 1 multiplexer.



A close-up photographs shows that the three analog multiplexers are at locations U12, U13, and U14 on the printed circuit board Aten manufactured. This photograph also demonstrates that the control signals output from the microcontroller (which Aten asserts is a control signal generator) are input to the multiplexors, just as is required by claim 3 of the '275 Patent:

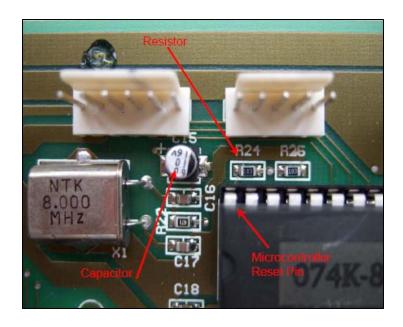


71. A schematic of this arrangement is as follows:

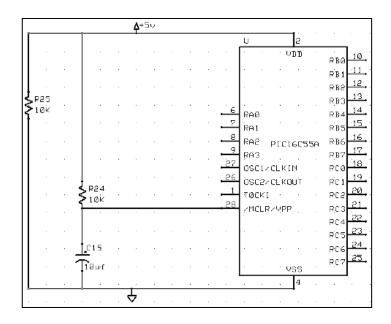


- 72. As is seen in this schematic, the Belkin Omniview KVM Switch has a "connector" that comprises a multiplexor where an input and an output of the multiplexor is connected respectively with each VGA interface of different electronic devices. The multiplexors in the Belkin Omniview KVM Switch further have a selecting signal input terminal that is connected with the output of the microcontroller.
- 73. Thus, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended application claim 4 (issued claim 3) of the '275 Patent Application to obtain its allowance by reciting a structure for the "connector" that was in all relevant respects identical to the "connector" present in the Belkin Omniview KVM Switch, which was designed and manufactured by Aten.
- 74. Comparing claim 3 of the '275 patent as it was issued (see paragraph 53 above) to the Belkin Omniview KVM Switch demonstrates that the only difference is that claim 1 requires USB interfaces whereas the Belkin Omniview KVM Switch has HD-15 VGA interfaces, DB-9 serial interfaces and DIN-5 AT interfaces. However, as demonstrated by the September 4, 2002 Office Action, the Examiner of the '275 Patent Application correctly did not believe substitution of one type of interface with a USB interface was patentable.

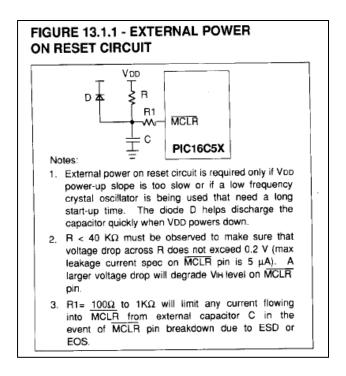
- 75. As discussed above, the Examiner allowed claim 10 of the '275 Patent after the corresponding claim in the '275 Patent Application (application claim 12) was amended include all the limitations of claim 1 as filed. Because claim 1 had been rejected by the Examiner while application claim 12 was indicated to be allowable if amended to include all the limitations of claim 1, the only feature of the claim the Examiner believed was not in the prior art was the structures recited comprising the "enable signal generator," namely a specific arrangement of a resistor and capacitor. However, when Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended the claim to obtain its allowance, each knew that the prior art Belkin Omniview KVM Switch contained the exact same "enable signal generator" structure that the Examiner believed distinguished the claim from the prior art. In particular, the Belkin Omniview KVM Switch contained a "enable signal generator," as required by application claim 12 (issued claim 10) as amended by Aten.
- 76. As discussed above (See paragraph 61), the Belkin Omniview KVM Switch has a component labeled as U6 on a printed circuit board within the Belkin Omniview KVM Switch that is almost certainly a microcontroller. The pin out of this microcontroller corresponds to a PIC 16C55 microcontroller. Pin 28 of a PIC 16C55 microcontroller is a "reset" pin, which is the same thing as an "enable" pin. Below is a photograph of the "enable signal generator" in the Belkin Omniview KVM Switch:



77. In the Belkin Omniview KVM Switch, pin 28 of the PIC 16C55 is connected to a resistor (labeled on the printed circuit board as R24) and a capacitor (labeled on the printed circuit board as C15). The resistor R24 and capacitor C15 are connected between the +5V supply and ground. A schematic of the "enable signal generator" present in the Belkin Omniview KVM Switch is as follows:



- 78. As is seen in this schematic, the Belkin Omniview KVM Switch has an "enbable signal generator" that comprises a resistor and a capacitor, where the resistor and the capacitor are serially connected between a power supply and ground, and where the point where the resistor and the capacitor are connected is used as an output to be connected with a reset terminal of the microcontroller (a structure Aten alleges in this litigation is control signal generator).
- 79. Thus, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended application claim 12 (issued claim 10) of the '275 Patent Application to obtain its allowance by reciting a structure for the "enable signal generator" that was in all relevant respects identical to the "enable signal generator" present in the Belkin Omniview KVM Switch, which was designed and manufactured by Aten.
- 80. Comparing claim 10 of the '275 patent as it was issued (see paragraph 54 above) to the Belkin Omniview KVM Switch demonstrates that the only difference is that claim 1 requires USB interfaces whereas the Belkin Omniview KVM Switch has HD-15 VGA interfaces, DB-9 serial interfaces and DIN-5 AT interfaces. However, as demonstrated by the September 4, 2002 Office Action, the Examiner of the '275 Patent Application correctly did not believe substitution of a USB interface for another type of interface was patentable.
- OmniView KVM switch (the Microchip PIC16C55) describes the exact arrangement for an enable signal generator that ATEN now claims in the '275 Patent. In particular, page 1-25 of the Microchip Data Book, 1992 Second Edition, teaches users of the PIC 16C55 how to create an "External Power On Reset Circuit." The "External Power On Reset Circuit" described in the 1992 Microchip databook has the same structure as the "enable signal generator" recited in claim 10 of the '275 Patent and has the exact same function recited in claim 10, namely to reset the circuit "whenever the power supply begins conducting."



- 82. On information and belief, the Microchip Data Book, 1992 Second Edition, was published and widely distributed in the year 1992. This makes the Microchip Data Book, 1992 Second Edition, prior art under 35 U.S.C. § 102(b).
- 83. On information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and their attorneys knew the structure of the Belkin Omniview KVM Switch as well as the fact that it was on sale and sold in the United States more than one year prior to the filing of the '275 Patent.
- 84. On information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and their attorneys knew that the Microchip Data Book, 1992 Second Edition, and/or subsequent variants thereof were published more than one year prior to the filing of the '275 Patent.
- 85. Despite having knowledge of the sale and/or offer for sale, the structure and materiality of the Belkin Omniview KVM Switch, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys failed disclose the Belkin Omniview

KVM Switch to the Examiner during prosecution of the '275 Patent. Because the undisclosed Belkin Omniview KVM Switch was so highly relevant, to withhold this information was a material breach of the duty owed to the USPTO under 37 C.F.R. § 1.56.

- 86. Despite having knowledge of the publication of the Microchip Data Book, 1992 Second Edition and/or subsequent variants thereof, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys failed disclose the Microchip Data Book, 1992 Second Edition and/or subsequent variants thereof to the Examiner during prosecution of the '275 Patent. Because the undisclosed the Microchip Data Book, 1992 Second Edition and/or subsequent variants thereof was so highly relevant, to withhold this information was a material breach of the duty owed to the USPTO under 37 C.F.R. § 1.56.
- 87. On information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys withheld the Belkin Omniview KVM Switch from the Examiner during the prosecution of the '275 Patent Application with the intent to deceive the Examiner and thereby obtain issuance of the claims in the '275 Patent.
- 88. On information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys withheld the Microchip Data Book, 1992 Second Edition and/or subsequent variants thereof from the Examiner during the prosecution of the '275 Patent Application with the intent to deceive the Examiner and thereby obtain issuance of the claims in the '275 Patent.
- 89. Thus, upon information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys specifically intended to deceive the USPTO as to the true state of the art and their claimed subject matter so as to induce the USPTO to improperly issue the '275 Patent. Such conduct was inequitable, rendering each and every claim of the '275 Patent unenforceable.

90. Belkin reserves the right to amend this allegation upon discovery from Plaintiffs of information related to this allegation, as well as to amend this Answer in the event other defenses are discovered during the course of this suit.

# **COUNTERCLAIMS**

Belkin asserts counterclaims against ATEN as follows:

### **JURISDICTION AND VENUE**

- 91. Belkin's Counterclaims arise under 28 U.S.C. §§ 2201 and 2202, and Belkin seeks declaratory relief as well as further relief based upon a declaratory judgment or decree. In the First Counterclaim, Belkin seeks a judicial declaration that it does not infringe the '275 Patent. In the Second Counterclaim, Belkin seeks a judicial declaration that the '275 Patent is invalid. In the Third Counterclaim, Belkin seeks a judicial declaration that the '275 Patent is unenforceable.
- 92. Venue as to these counterclaims is proper in this district because ATEN has submitted to this Court's jurisdiction by the filing of the Complaint in this action.
- 93. Upon information and belief, the '275 Patent is unenforceable by reason of inequitable conduct committed during the prosecution of the patent before the United States Patent and Trademark Office ("USPTO"). While the scope of such inequitable conduct is not now known in its entirety and with precision, such conduct includes the deliberate withholding of material information from the USPTO described below.
- 94. On or about February 28, 2000, the law firm Bacon & Thomas, PLLC filed U.S. Patent Application No. 09/514,579, entitled "An Electronic Switching Device for a Universal Serial Bus Interface" on behalf of Sun Chung Chen. This application issued as the '275 Patent on May 13, 2003 and is assigned to Aten International Co., Ltd. The '275 Patent claims priority to a Taiwanese patent application filed May 28, 1999. On information and belief, Mr. Chen was the Chief Executive Officer of Aten International Co., Ltd. at the time the '275 Patent Application was filed and throughout the prosecution

thereof. The application that issued as the '275 Patent will be referred to herein as "the '275 Patent Application."

- 95. Aten International Co., Ltd., Sun Chung Chen and/or their attorneys failed to disclose material prior art and material information in connection with the prosecution of the '275 Patent Application. This failure to disclose was a violation of Sun Chung Chen's, Aten International Co., Ltd.'s and/or their attorneys' duties of candor and good faith. 37 C.F.R. § 1.56. Upon information and belief, this omission was done with the intent to deceive or mislead the USPTO.
- 96. When the '275 Patent Application was filed, it contained fourteen claims, one of which was independent and thirteen of which were dependent (either directly or indirectly) on claim 1. These claims were as follows:
  - 1. An electronic switching device for a universal serial bus (USB) interface, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

the trigger signal generator having an output to be connected with an input of the control signal generator, and having a switch to output a trigger signal to the control signal generator when a user enables the switch;

the control signal generator having an input to be connected with an output of the trigger signal generator, and having an ouput to be connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, and processing the trigger signal, then outputting a control signal to the connector;

the connector having an input to be connected with each universal serial bus (USB interface of at least two electronic devices, and having an output to be connected with a universal serial bus (USB( interface of another electronic device, when the connector receives the control signal outputted from the the control signal generator, the connector will connect related universal serial bus (USB) interfaces according to the control signal.

2. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the trigger signal generator comprising a resistor, a capacitor, and a switch, the resistor and the capacitor are serially connected between a power supply and a ground, one end of the switch is connected to the ground, the other end of the switch is connected to where the resistor and the capacitor are connected, enabling the switch to generate a pulse signal to be used as the trigger signal.

- 3. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator comprising a D FLIP-FLOP, having a clock signal input terminal to be used as the input of the control signal generator, and having a reverse data output terminal to be connected with a data input terminal thereof, a positive data output terminal thereof is used as the output of the control signal generator.
- 4. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the connector comprising a multiplexor, an input and an output of the multiplexor are connected respectively with each universal serial bus (USB) interface of different electronic devices, and a selecting signal input terminal thereof is connected with the output of the control signal generator.
- 5. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator comprising at least two D FLIP-FLOP's, a clock signal input terminal of the first D FLIP-FLOP is connected with the output of the trigger signal generator, while a reverse data output terminal is connected with its data input terminal; a clock signal input terminal of the second D FLIP-FLOP is connected with the reverse data output terminal of the first D FLIP-FLOP, while a reverse data output terminal of the second D FLIP-FLOP is connected with its data input terminal and so on; and the positive data output terminals of all the D FLIP-FLOP's are used as the control signals for the connector.
- 6. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the connector comprising at least two identical multiplexors to be parallely connected for decreasing the internal resistance in the connector.
- 7. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein a delay signal generator is provided between the trigger signal generator and the connector, having an input to be connected with the output of the trigger signal generator, and having an output to be connected with tan enable terminal of the connector.
- 8. An electronic switching device for a universal serial bus (USB) interface according to claim 7, wherein the delay signal generator comprising two resistors, a capacitor and a diode, having its input to be connected with the output of the trigger signal generator, and having its output to be connected with the enable terminal of the connector, the first resistor and the capacitor are serially connected between a power supply and a ground, a point where the first resistor and the capacitor are connected is connected with a positive terminal of the diode and the enable terminal of the connector, while a negative terminal of the diode is connected with one end of the second resistor, the other end of the second resistor is the input terminal of the delay signal generator

- 9. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator is connected with a display for showing the current connections of the universal serial bus (USB) interfaces.
- 10. An electronic switching device for a universal serial bus (USB) interface according to claim 9, wherein the display comprising light emitting diodes.
- 11. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator is connected with an enable signal generator so that the connections between different USB interfaces are the same whenever the power supply begins conducting.
- 12. An electronic switching device for a universal serial bus (USB) interface according to claim 11, wherein the enable signal generator comprising a resistor and a capacitor, the resistor and the capacitor are serially connected between the power supply and the ground, a point where the resistor and the capacitor are connected is used as an output to be connected with a reset terminal of the control signal generator.
- 13. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the power supply used by the electronic switching device for a universal serial bus (USB) interface is the power supply used by the connected universal serial bus (USB) interface
- 14. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein a diode is connected between the power supply and each USB interface to avoid the reverse current flowing from USB interface to the power supply
- 97. On September 4, 2002, during prosecution of the '275 Patent Application, the Examiner working for the USPTO issued an Office Action rejecting claims 1, 9-11, 13 and 14 under 35 U.S.C. § 103 as being unpatentable over the combination of U.S. Patent No. 6,118,496 ("Ho") in view of U.S. Patent No. 6,012,103 ("Sartore"). In the September 4, 2002 Office Action, the Examiner stated that Ho taught every limitation of claim 1 as filed except for the recited USB interfaces. The Examiner stated that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sartore, which taught USB interfaces, with the switching apparatus taught in Ho to arrive at the structure recited in claim 1.

- 98. In the same September 4, 2002 Office Action, the Examiner objected to claims 2-8 and 12 but indicated these claims 2-8 and 12 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." By doing so, the Examiner was indicating that he was not able to find the structure of the "trigger signal generator" recited in application claim 2 in the prior art. Similarly, this objection meant that the Examiner was not able to find the structure of the "connector" recited in application claim 4 in the prior art. Finally, the objection meant that the Examiner was not able to find the structure for the "enable signal generator" recited in application claim 12.
- 99. In response to this Office Action, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, did not attempt to argue that the Examiner's rejection under 35 U.S.C. § 103 was incorrect and therefore acquiesced in the rejection. Instead, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, only sought to overcome the claim objections made by the Examiner by rewriting claims 2-8 and 12 in independent form. The differences between the certain claims as filed and what eventually issued is printed below, with the additions to claims underlined and the deletions shown as being stricken through.
- 100. The differences between claim 1 of the '275 Patent as issued and the corresponding claim as filed are as follows:

(Issued claim 1, which was filed as claim 1) An electronic switching device for a universal serial bus (USB) interface, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

the trigger signal generator <u>having has</u> an output to be connected with an input of the control signal generator, and a switch to output a trigger signal to the control signal generator when a user enables the switch;

the trigger signal generator comprises a resistor, a capacitor, and a switch, the resistor and the capacitor being serially connected between a power supply and a ground one end of the switch being connected to the ground, and the other end of the switch being connected to where the resistor and the capacitor are connected, such that when a user enables the switch, the switch will generate a pulse signal to be used as a trigger signal for

outputting to the control signal generator;

the control signal generator <u>having has</u> an input to be connected with an output of the trigger signal generator, and <u>having</u> an <u>ouput output</u> to be connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, <u>and</u> processing the trigger signal, <u>and</u> then outputting a control signal to the connector; <u>and</u>

the connector having has an input to be connected with each universal serial bus (USB) interface of at least two electronic devices, and having an output to be connected with a universal serial bus (USB) interface of another electronic device, such that when the connector receives the control signal outputted from the control signal generator, the connector will connect related universal serial bus (USB) interfaces according to the control signal.

As can be seen, claim 1 of the '275 patent was allowed by the Examiner because it recited the structure for the claimed "trigger signal generator," namely a specific arrangement of a switch, resistor and capacitor.

101. The differences between claim 3 of the '275 Patent as issued and the corresponding claim as filed are as follows:

(Issued claim 3, which was filed as claim 4) An electronic switching device for a universal serial bus (USB) interface according to claim 1, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

the trigger signal generator has an output to be connected with an input of the control signal generator, and a switch to output a trigger signal to the control signal generator when a user enables the switch;

the control signal generator has an input to be connected with an output of the trigger signal generator, and an output to be connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, processing the trigger signal, and then outputting a control signal to the connector; and

the connector has an input to be connected with each universal serial bus (USB) interface of at least two electronic devices, and an output to be connected with a universal serial bus (USB) interface of another electronic device, such that when the connector receives the control signal outputted from the control signal generator, the connector will connect related universal serial bus (USB) interfaces according to the control signal, and

the connector <del>comprising</del> comprises a multiplexor, an input and an output of the multiplexor <del>are</del> <u>being</u> connected respectively with each universal serial bus (USB) interface of different electronic devices, and a selecting signal input terminal thereof <u>is</u> <u>being</u> connected with the output of the control signal generator.

As can be seen, claim 3 of the '275 patent was allowed by the Examiner because it recited

the structure for the claimed "connector," namely a multiplexor.

102. The differences between claim 10 of the '275 Patent as issued and the corresponding claim as filed are as follows:

(Issued Claim 10, which was filed as claim 12) An electronic switching device for a universal serial bus (USB) interface according to claim 1, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

the trigger signal generator has an output to be connected with an input of the control signal generator, and a switch to output a trigger signal to the control signal generator when a user enables the switch;

the control signal generator has an input to be connected with an output of the trigger signal generator, and an output to be connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, processing the trigger signal and then outputting a control signal to the connector; and

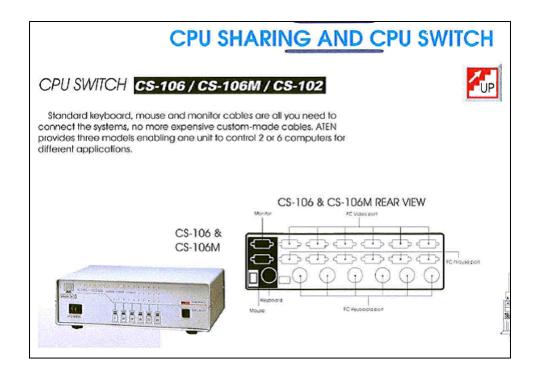
the connector has an input to be connected with each universal serial bus (USB) interface of at least two electronic devices, and an output to be connected with a universal serial bus (USB) interface of another electronic device, such that when the connector receives the control signal outputted from the control signal generator, the connector will connect related universal serial bus (USB) interfaces according to the control signal,

the control signal generator is connected with an enable signal generator so that the connections between different USB interfaces are the same whenever the power supply begins conducting; and

the enable signal generator <u>comprising comprises</u> a resistor and a capacitor, the resistor and the capacitor <u>are being serially connected between the power supply and the ground, <u>and</u> a point where the resistor and the capacitor are connected <u>is being</u> used as an output to be connected with a reset terminal of the control signal generator.</u>

As can be seen, claim 10 of the '275 patent was allowed by the Examiner because it recited the structure for the claimed "enable signal generator," namely a specific arrangement of a resistor and capacitor.

103. On information and belief, in 1996 or 1997, Aten offered for sale and/or sold, in the United States, a KVM switch identified with the part number CS-106. The product was sold as under the Aten brand name and was offered for sale in the United States and could be found in Aten's 1996 product catalog:



104. On information and belief, at approximately the same time, and no later than March of 1998, Belkin sold a KVM switch which it identified as the Belkin Omniview AT Style KVM Switch. Belkin assigned SKU – F1D065 to the Omniview AT Style KVM Switch. The Belkin Omniview AT Style KVM Switch was manufactured by Aten International Co., Ltd for Belkin. On information and belief, the Belkin Omniview AT Style KVM Switch is virtually identical in structure, function and operation to the Aten CS-106. Below are photographs of the front and back of the Belkin Omniview AT Style KVM Switch:





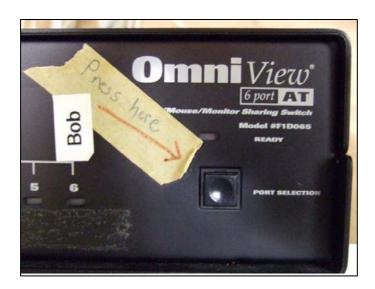
105. The photograph below of a printed circuit board within the Belkin Omniview AT Style KVM Switch establishes that it was manufactured by Aten, as Aten placed its name on the board. In addition, this board has the number code "9737" printed thereon. On information and belief, the number code "9737" is a date code establishing that this board was manufactured in the thirty seventh week of 1997.



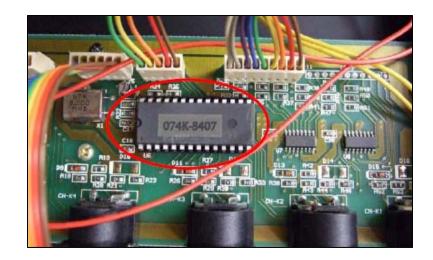
- Belkin Omniview AT Style KVM Switch was sold at least as early as March 1998, each of these products, both of which were manufactured by Aten International Co., Ltd, are prior art under 35 U.S.C. § 102(b) to the '275 Patent. The Aten CS-106 and Belkin Omniview AT Style KVM Switch will be referred to herein as the "Belkin Omniview KVM Switch" since this is the actual switch that Belkin has been able to locate and photograph.
- 107. The Belkin Omniview KVM Switch is remarkably similar in structure, function and operation to the switch described and claimed in the '275 patent and discloses every limitation of claim 1 of the '275 Patent as it was filed on February 28, 2000 and issued on May 13, 2003, except for the USB interfaces. However, substitution of USB interfaces with other types of interfaces, e.g., HD-15 VGA interfaces, DB-9 serial

interfaces and DIN-5 AT interfaces, is not patentable, as is demonstrated by the Examiner's refusal to allow claim 1 over a prior art reference ("Ho") that contained interfaces other than USB interfaces. Notwithstanding this fact, neither Aten International Co., Ltd., inventor Sun Chung Chen nor any of their attorneys disclosed the Belkin Omniview AT Style KVM Switch to the USPTO.

108. In particular, the Belkin Omniview KVM Switch has a "trigger signal generator," as is demonstrated by this photograph:

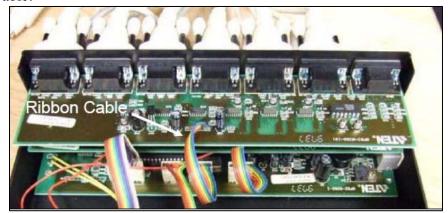


109. The output of the "trigger signal generator" in the Belkin Omniview KVM Switch produces a "trigger signal" and is connected to pin 15 of component labeled as U6 on a printed circuit board within the Belkin Omniview KVM Switch, as seen in the photograph below (circled in red):



The component at U6 is almost certainly a microcontroller, as it matches the pin out of a Microchip PIC 16C55, a microcontroller that was widely in use in 1996-1998.<sup>3</sup> In ATEN's infringement contentions served in this litigation, ATEN asserts that microcontrollers used in Belkin's products comprise a control signal generator, meaning that microcontrollers fall within ATEN's definition of a control signal generator.

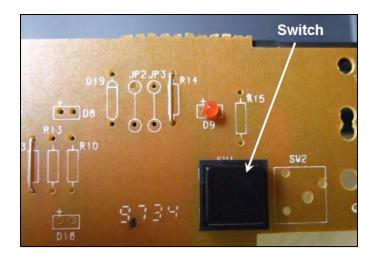
110. The output of the microcontroller, the electronic component Aten asserts in this litigation is a "control signal generator," is a control signal (comprised of three bits). The control signal, along with several other signals, are sent to a "connector" over a ribbon cable:



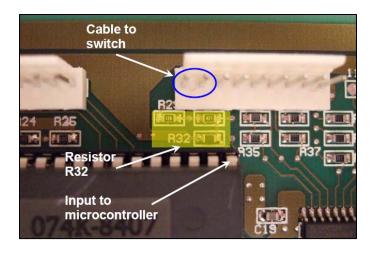
<sup>3</sup> It appears that ATEN removed the part numbers from the chip during manufacture of the Belkin Omniview KVM Switch.

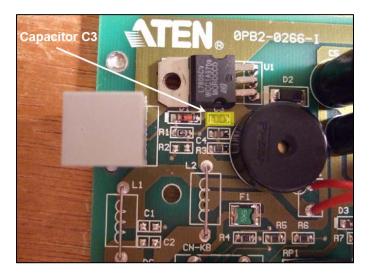
When the "connector" receives the control signal outputted from the microcontroller, the connector will connect VGA interfaces according to the control signal.

- 111. In sum, comparing claim 1 of the '275 patent as it was filed (see paragraph 96 above) to the Belkin Omniview KVM Switch demonstrates that the only difference is that claim 1 as filed required USB interfaces whereas the Belkin Omniview KVM Switch has HD-15 VGA interfaces, DB-9 serial interfaces and DIN-5 AT interfaces. However, as demonstrated by the September 4, 2002 Office Action, the Examiner of the '275 Patent Application correctly did not believe substitution of one type of interface with a USB interface was patentable.
- 112. As discussed above, the Examiner allowed claim 1 of the '275 Patent after claim 1 was amended to recite the specific structures that comprised the "trigger signal generator." However, when Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended claim 1 to obtain its allowance, each knew that the prior art Belkin Omniview KVM Switch contained the exact same "trigger signal generator" structure that the Examiner believed distinguished their claims from the prior art. In particular, the Belkin Omniview KVM Switch contained a "switch", as required by claim 1 as amended:

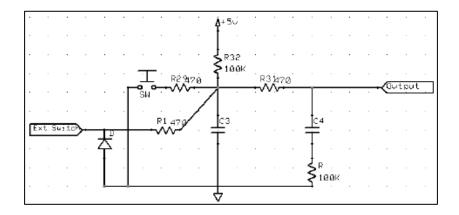


113. The remaining components of the "trigger signal generator" required by claim 1 of the '275 Patent are shown in the photographs below:



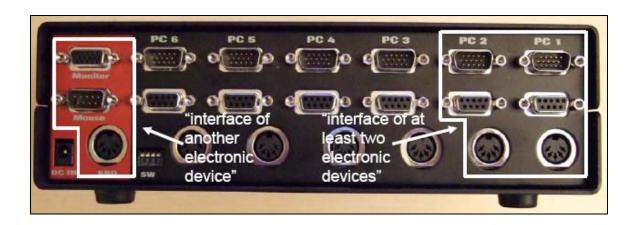


The schematic of this structure is below:



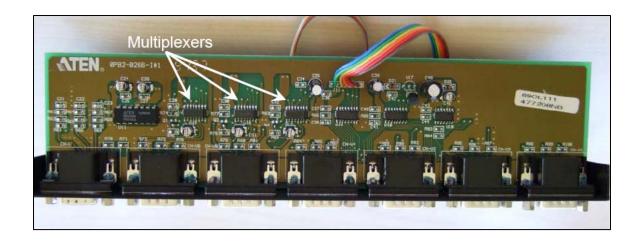
- 114. As is seen in this schematic, the Belkin Omniview KVM Switch has a "trigger signal generator" that comprises a resistor, a capacitor, and a switch, where the resistor and the capacitor are serially connected between a power supply and a ground, and where one end of a switch is connected to the ground while the other end of the switch is connected to where the resistor and the capacitor are connected.
- 115. Thus, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended claim 1 to obtain its allowance by reciting a structure for the "trigger signal generator" that was in all relevant respects identical to the "trigger signal generator" present in the Belkin Omniview KVM Switch, which was designed and manufactured by Aten.
- above) to the Belkin Omniview KVM Switch demonstrates that the only difference is that claim 1 requires USB interfaces whereas the Belkin Omniview KVM Switch has HD-15 VGA interfaces, DB-9 serial interfaces and DIN-5 AT interfaces. However, as demonstrated by the September 4, 2002 Office Action, the Examiner of the '275 Patent Application correctly did not believe substitution of one type of interface with a USB interface was patentable.
- 117. As discussed above, the Examiner allowed claim 3 of the '275 Patent after the corresponding claim in the '275 Patent Application (application claim 3) was

amended to include all the limitations of claim 1 as filed. Because claim 1 had been rejected by the Examiner while application claim 4 (issued claim 3) was indicated to be allowable if amended to include all the limitations of claim 1, the only feature of the claim the Examiner believed was not in the prior art was the specific structures recited comprising the "connector," namely a multiplexor. However, when Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended the claim to obtain its allowance, each knew that the prior art Belkin Omniview KVM Switch contained the exact same "connector" structure that the Examiner believed distinguished their claims from the prior art. In particular, the Belkin Omniview KVM Switch contained a "connector", as required by application claim 4 (issued claim 3) as amended:

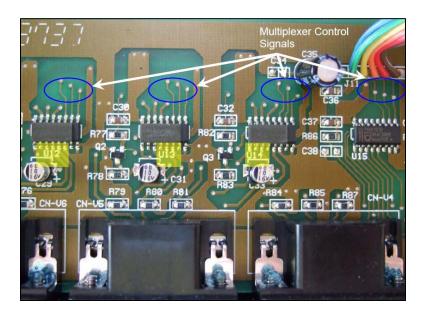


above) is sent over a ribbon cable to multiplexers that switch VGA display signals. In particular, the control signal output from the microcontroller at U6 is connected to the selection inputs of integrated circuits that are almost certainly multiplexors belonging to the "4051" family.<sup>4</sup> In particular, three analog multiplexors switch VGA interfaces in the exact same fashion the multiplexor recited in claim 3 switches USB interfaces:

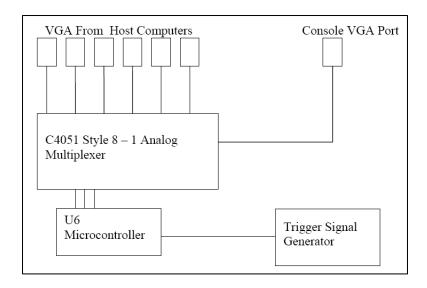
<sup>&</sup>lt;sup>4</sup> When ATEN manufactured the Belkin OmniView KVM Switch, it removed or obscured the manufacturer's markings on these integrated circuits but the pin outs of these chips match the pin out of a CD 4051 8 to 1 multiplexer.



A close-up photographs shows that the three analog multiplexers are at locations U12, U13, and U14 on the printed circuit board Aten manufactured. This photograph also demonstrates that the control signals output from the microcontroller (which Aten asserts is a control signal generator) are input to the multiplexors, just as is required by claim 3 of the '275 Patent:

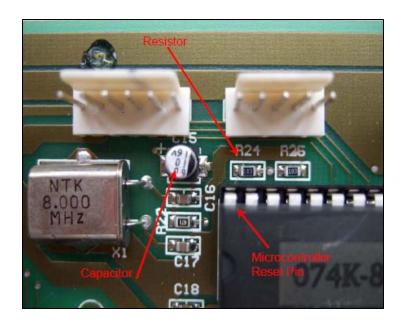


119. A schematic of this arrangement is as follows:

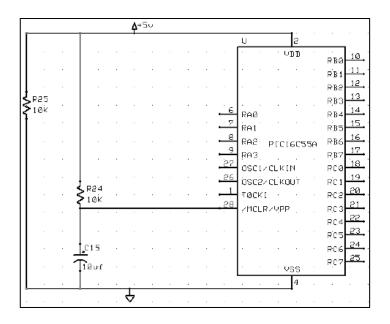


- 120. As is seen in this schematic, the Belkin Omniview KVM Switch has a "connector" that comprises a multiplexor where an input and an output of the multiplexor is connected respectively with each VGA interface of different electronic devices. The multiplexors in the Belkin Omniview KVM Switch further have a selecting signal input terminal that is connected with the output of the microcontroller.
- 121. Thus, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended application claim 4 (issued claim 3) of the '275 Patent Application to obtain its allowance by reciting a structure for the "connector" that was in all relevant respects identical to the "connector" present in the Belkin Omniview KVM Switch, which was designed and manufactured by Aten.
- above) to the Belkin Omniview KVM Switch demonstrates that the only difference is that claim 1 requires USB interfaces whereas the Belkin Omniview KVM Switch has HD-15 VGA interfaces, DB-9 serial interfaces and DIN-5 AT interfaces. However, as demonstrated by the September 4, 2002 Office Action, the Examiner of the '275 Patent Application correctly did not believe substitution of one type of interface with a USB interface was patentable.

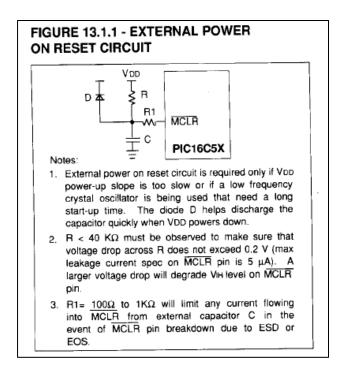
- after the corresponding claim in the '275 Patent Application (application claim 12) was amended include all the limitations of claim 1 as filed. Because claim 1 had been rejected by the Examiner while application claim 12 was indicated to be allowable if amended to include all the limitations of claim 1, the only feature of the claim the Examiner believed was not in the prior art was the structures recited comprising the "enable signal generator," namely a specific arrangement of a resistor and capacitor. However, when Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended the claim to obtain its allowance, each knew that the prior art Belkin Omniview KVM Switch contained the exact same "enable signal generator" structure that the Examiner believed distinguished the claim from the prior art. In particular, the Belkin Omniview KVM Switch contained a "enable signal generator," as required by application claim 12 (issued claim 10) as amended by Aten.
- 124. As discussed above (See paragraph 109), the Belkin Omniview KVM Switch has a component labeled as U6 on a printed circuit board within the Belkin Omniview KVM Switch that is almost certainly a microcontroller. The pin out of this microcontroller corresponds to a PIC 16C55 microcontroller. Pin 28 of a PIC 16C55 microcontroller is a "reset" pin, which is the same thing as an "enable" pin. Below is a photograph of the "enable signal generator" in the Belkin Omniview KVM Switch:



125. In the Belkin Omniview KVM Switch, pin 28 of the PIC 16C55 is connected to a resistor (labeled on the printed circuit board as R24) and a capacitor (labeled on the printed circuit board as C15). The resistor R24 and capacitor C15 are connected between the +5V supply and ground. A schematic of the "enable signal generator" present in the Belkin Omniview KVM Switch is as follows:



- 126. As is seen in this schematic, the Belkin Omniview KVM Switch has an "enbable signal generator" that comprises a resistor and a capacitor, where the resistor and the capacitor are serially connected between a power supply and ground, and where the point where the resistor and the capacitor are connected is used as an output to be connected with a reset terminal of the microcontroller (a structure Aten alleges in this litigation is control signal generator).
- 127. Thus, Aten International Co., Ltd. and Sun Chung Chen, through their attorneys, amended application claim 12 (issued claim 10) of the '275 Patent Application to obtain its allowance by reciting a structure for the "enable signal generator" that was in all relevant respects identical to the "enable signal generator" present in the Belkin Omniview KVM Switch, which was designed and manufactured by Aten.
- above) to the Belkin Omniview KVM Switch demonstrates that the only difference is that claim 1 requires USB interfaces whereas the Belkin Omniview KVM Switch has HD-15 VGA interfaces, DB-9 serial interfaces and DIN-5 AT interfaces. However, as demonstrated by the September 4, 2002 Office Action, the Examiner of the '275 Patent Application correctly did not believe substitution of a USB interface for another type of interface was patentable.
- 129. The databook for the microcontroller ATEN chose to use in the Belkin OmniView KVM switch (the Microchip PIC16C55) describes the exact arrangement for an enable signal generator that ATEN now claims in the '275 Patent. In particular, page 1-25 of the Microchip Data Book, 1992 Second Edition, teaches users of the PIC 16C55 how to create an "External Power On Reset Circuit." The "External Power On Reset Circuit" described in the 1992 Microchip databook has the same structure as the "enable signal generator" recited in claim 10 of the '275 Patent and has the exact same function recited in claim 10, namely to reset the circuit "whenever the power supply begins conducting."



- 130. On information and belief, the Microchip Data Book, 1992 Second Edition, was published and widely distributed in the year 1992. This makes the Microchip Data Book, 1992 Second Edition, prior art under 35 U.S.C. § 102(b).
- 131. On information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and their attorneys knew the structure of the Belkin Omniview KVM Switch as well as the fact that it was on sale and sold in the United States more than one year prior to the filing of the '275 Patent.
- 132. On information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and their attorneys knew that the Microchip Data Book, 1992 Second Edition, and/or subsequent variants thereof were published more than one year prior to the filing of the '275 Patent.
- 133. Despite having knowledge of the sale and/or offer for sale, the structure and materiality of the Belkin Omniview KVM Switch, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys failed disclose the Belkin Omniview

KVM Switch to the Examiner during prosecution of the '275 Patent. Because the undisclosed Belkin Omniview KVM Switch was so highly relevant, to withhold this information was a material breach of the duty owed to the USPTO under 37 C.F.R. § 1.56.

- 134. Despite having knowledge of the publication of the Microchip Data Book, 1992 Second Edition and/or subsequent variants thereof, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys failed disclose the Microchip Data Book, 1992 Second Edition and/or subsequent variants thereof to the Examiner during prosecution of the '275 Patent. Because the undisclosed the Microchip Data Book, 1992 Second Edition and/or subsequent variants thereof was so highly relevant, to withhold this information was a material breach of the duty owed to the USPTO under 37 C.F.R. § 1.56.
- 135. On information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys withheld the Belkin Omniview KVM Switch from the Examiner during the prosecution of the '275 Patent Application with the intent to deceive the Examiner and thereby obtain issuance of the claims in the '275 Patent.
- 136. On information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys withheld the Microchip Data Book, 1992 Second Edition and/or subsequent variants thereof from the Examiner during the prosecution of the '275 Patent Application with the intent to deceive the Examiner and thereby obtain issuance of the claims in the '275 Patent.
- 137. Thus, upon information and belief, Aten International Co., Ltd., inventor Sun Chung Chen, and/or their attorneys specifically intended to deceive the USPTO as to the true state of the art and their claimed subject matter so as to induce the USPTO to improperly issue the '275 Patent. Such conduct was inequitable, rendering each and every claim of the '275 Patent unenforceable.

138. Belkin reserves the right to amend this allegation upon discovery from Plaintiffs of information related to this allegation, as well as to amend this Answer in the event other defenses are discovered during the course of this suit.

## FIRST COUNTERCLAIM (For Declaratory Judgment of Patent Non-Infringement)

- 139. Belkin incorporates here the foregoing admissions, denials, and allegations.
- 140. An actual controversy exists between Belkin and ATEN as to whether Belkin infringes, contributes to the infringement of, or induces infringement of the '112 and '275 patent, as ATEN contends, or does not do so, as Belkin contends.
- and does not infringe the '112 and '275 patents either literally or under the doctrine of equivalents. Further, Belkin seeks a declaration that it has not contributed to or induced and does not contribute to or induce infringement of the '112 and '275 patents by anyone. A judicial declaration is necessary and appropriate at this time in order that Belkin may ascertain its rights and duties with respect to the '112 and '275 patents and with respect to any past, present, or future manufacture, use, importation, distribution, sale, or offer for sale of its products.

# **SECOND COUNTERCLAIM**(For Declaratory Judgment of Patent Invalidity)

- 142. Belkin incorporates here the foregoing admissions, denials, and allegations.
- 143. An actual controversy exists between Belkin and ATEN as to whether the '112 and '275 patents are valid, as ATEN contends, or is invalid for failure to comply with the requirements of patentability set forth in 35 U.S.C. §§ 101 *et seq.*, as Belkin contends.

144. By this Counterclaim, Belkin seeks a declaration that the '112 and '275 patents are invalid and/or are unenforceable. A judicial declaration is necessary and appropriate at this time in order that Belkin may ascertain its rights and duties with respect to the '112 and '275 patents and to any past, present, or future manufacture, use, importation, distribution, sale, or offer of its products.

### THIRD COUNTERCLAIM (For Declaratory Judgment of Patent Unenforceability)

- 145. Belkin incorporates here the foregoing admissions, denials, and allegations.
- Patent and that the '275 Patent is valid and enforceable, and that Belkin has infringed the '275 Patent by making, offering for sale, selling, and using certain products. Belkin denies that any of its products infringes or has infringed any claim of the '275 Patent directly, indirectly, contributorily, or otherwise and contends that the '275 Patent is unenforceable due to inequitable conduct by Aten International Co., Ltd., Sun Chung Chen and/or their attorneys. In particular, Aten International Co., Ltd., Sun Chung Chen and/or their attorneys failed to comply with their duty of candor, in that Aten International Co., Ltd., Sun Chung Chen and omissions to the PTO that are material to the patentability of the '275 patent. A justiciable controversy therefore exists between ATEN and Belkin.
- 147. By this counterclaim, Belkin seeks a declaratory judgment that the '275 Patent is unenforceable due to inequitable conduct by Aten International Co., Ltd., Sun Chung Chen and/or their attorneys.
- 148. A judicial declaration is necessary and appropriate at this time so that Belkin may ascertain its rights and duties with respect to the manufacture and sale of its products that ATEN alleges infringe the '275 Patent.

#### PRAYER FOR RELIEF

WHEREFORE, Belkin prays for judgment as follows:

- 1. That ATEN take nothing by its Complaint and that its Complaint be dismissed;
- 2. That the Court determine and declare that Belkin and its products have not infringed and do not infringe the '112 or '275 patents;
- 3. That the Court declare that Belkin has not contributed to or induced and does not contribute to or induce infringement of the '112 or '275 patents by anyone;
  - 4. That the Court declare that the '112 and '275 patents are invalid;
  - 5. That the Court declare that the '112 and '275 patents are unenforceable;
- 6. That the Court award Belkin its attorneys' fees and litigation expenses under 28 U.S.C. § 1927 and 35 U.S.C. § 285 or on any other applicable basis;
  - 7. That the Court award Belkin its costs of suit; and
- 8. That Belkin receive such other and further relief as the Court deems appropriate.

### **DEMAND FOR JURY TRIAL**

Belkin requests a trial by jury of all issues properly decided by a jury.

Respectfully submitted,

May 11, 2009

/s/ Yasser M. El-Gamal

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#### **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that all counsel of record who have consented to electronic service are being served with a copy of the foregoing **DEFENDANTS BELKIN INTERNATIONAL, INC. AND BELKIN, INC.'S SUPPLEMENTAL ANSWER TO FIRST AMENDED COMPLAINT AND COUNTERCLAIMS** via the Court's CM/ECF system per Local Rule on May 11, 2009. In addition, I served the above-referenced document on Emine Technology Co., Ltd. via U.S. Mail and Federal Express at the address indicated below:

Emine Technology Co., Ltd. Attention: Michael Kao, CEO 8FL, No. 3, Lane 45, Sec. 2 Chung-Shan N. Rd. Taipei, Taiwan, R.O.C.

VIA FEDERAL EXPRESS: I placed the document(s) listed below in a sealed envelope or package, addressed as set forth below, for collection and delivery by an overnight carrier. I am readily familiar with the firm's practice of collection and processing correspondence by overnight delivery carrier. Under that practice it would be picked up in our offices by an overnight delivery carrier or delivered to a drop box or office of the overnight delivery carrier on that same day in the ordinary course of business.

**VIA U.S. MAIL**: I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

/s/Yasser El-Gamal Yasser El-Gamal